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(54) **DRIVE DEVICE WITH A HYPOCYCLOID GEAR ASSEMBLY FOR A FORMING MACHINE**

(71) Applicant: **Schuler Pressen GmbH**, Göppingen (DE)

(72) Inventors: **Thomas Merkle**, Schlat (DE); **Roland Meier**, Rechberghausen (DE); **Carola Lebschy**, Göppingen (DE)

(73) Assignee: **SCHULER PRESSEN GMBH**, Göppingen (DE)

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CPC ... F16H 21/365; B30B 15/0064; B30B 1/266; B21D 51/26; Y10T 74/18056
See application file for complete search history.

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Primary Examiner — Sherry Estremsky
(74) *Attorney, Agent, or Firm* — Fitch, Even, Tabin & Flannery LLP

(57) **ABSTRACT**

A drive device (**10**) for a forming machine (**11**) includes a hypocycloid gear assembly (**20**) having an eccentric gear (**23**), a stationary annulus gear (**24**) and a planetary gear system (**28**). The planetary gear system (**28**) includes an orbiting gear (**29**) orbiting and rolling in an annulus gear (**24**). The orbiting gear (**29**) is connected to at least one first planetary gear (**35**). On the first planetary gear (**35**), a first planetary gear equalization mass (m_2) is disposed diametrically opposite an output bearing. At least one first eccentric gear equalization mass (m_3) is arranged on the eccentric gear (**23**). The first eccentric gear equalization mass (m_3) is arranged diametrically opposite, relative to a planetary gear axis (PA) about which the planetary gear system (**28**) rotates. The resultant forces and torques acting on the annulus gear (**24**) can at least be reduced by the equalization masses.

10 Claims, 3 Drawing Sheets